- Reviews of audit reports, identified in ANSI N18.7-1976 Section 4.5, are performed by management of the audited area and Nuclear Oversight instead of the independent review function.
- Reviews of the corrective actions for significant conditions adverse to quality are performed by appropriate management. Collectively, the On-Site Review Committee and the NOS audit function perform the independent review, identified in ANSI N18.7-1976 Section 5.2.11, for significant conditions adverse to quality.

17.3.3.2.1 On-Site Review Committee

The On-Site Review Committee is responsible to the Nuclear Plant Manager for advice on all plant-related matters concerning nuclear safety. The requirements for personnel, committee composition, meeting frequency, quorum and meeting records are identified in procedures. A general description of these areas is included below. (Note: Each plant may name this function differently. Regardless of the name, these requirements are met.)

In discharging its independent review responsibilities, the On-Site Review Committee keeps safety considerations paramount when opposed to cost or schedule considerations. Should a voting member at a particular meeting have direct responsibility for item under review where a conflict of such considerations is likely, that member is replaced (to fill the quorum) by another voting member not having such potential conflict.

17.3.3.2.1.1 Composition

The On-Site Review Committee is comprised of a minimum number of members as designated by the Plant Manager and detailed in procedures. All members are qualified in accordance with procedure requirements that meet site Technical Specifications. Membership includes representation from at least the following disciplines: Operations, Maintenance, Engineering, Radiation Protection and Chemistry. The On-Site Review Committee collectively has, or has access to, the experience and competence necessary to review the areas of (1) nuclear power plant operations, (2) nuclear engineering, (3) chemistry and radiochemistry, (4) metallurgy, (5) nondestructive testing, (6) instrumentation and control, (7) radiological safety, (8) mechanical and electrical engineering, (9) administrative controls and quality assurance practices, and (10) other fields associated with the unique characteristics of the plant. Consultants may be utilized to provide expert advice as needed.

Alternate chairmen and members may be appointed by the Nuclear Plant Manager to serve on a permanent or temporary basis.

17.3.3.2.1.2 Meetings

The On-Site Review Committee meets commensurate with the scope of activities, but minimal frequency requirements are specified in procedures.

Rules for a quorum are established and adhered to. However, no more than a minority of alternates may participate as voting members at any one time.

17.3.3.2.1.3 Review Topics

In performing its independent review responsibilities, the On-Site Review Committee reviews:

(1) Proposed changes to the facility as described in the UFSAR. This review is to confirm that the regulatory required written evaluation provides adequate bases for the determination that the change does not require a license amendment.
(2) Proposed changes to procedures as described in the UFSAR and tests or experiments not described in the UFSAR. This review is to confirm that the regulatory required written evaluation provides adequate bases for the determination that the test or experiment does not require a license amendment.
(3) Proposed Technical Specifications changes and license amendments, except in those cases where the change is identical to a previously reviewed proposed change.
(4) Licensee Event Reports that are required to be made to the NRC. This review includes results of any investigations made and recommendations resulting from such investigations to prevent or reduce the probability of recurrence of the event.
(5) Any other matter related to nuclear safety requested by the Site executive, Plant Manager, selected by On-Site Review Committee members, or referred for review by other organizations.

In addition to reviews of license amendments addressed by (3) above, the On-Site Review Committee should be informed of changes to Site documents that are required to be reported to the NRC. When appropriate, the On-Site Review Committee conducts reviews of such changes to confirm the changes have been prepared and internally approved within license obligations and can be effectively implemented. These documents include the Offsite Dose Calculation Manual (ODCM), the Process Control Program (PCP), the Emergency Plan, and the Security Plan.

The On-Site Review Committee may establish subcommittees or designate organizational units to carry out the reviews. The subcommittees or organizational units report results of reviews for full committee consideration and may recommend items for full committee review as warranted. The reviews by the On-Site Review Committee recognize that the QA Program requires independent technical reviews to be completed including, but not limited to, design verification and reviews of procedures. Those independent technical reviews are conducted commensurate with the importance to nuclear safety of the item or activity. In conducting its review, the On-Site Review Committee is confirming the changes have been prepared and internally approved within license obligations and can be effectively implemented, not re-performing completed technical reviews.

The On-Site Review Committee conducts special reviews and investigations as requested by the Site executive or Nuclear Plant Manager.

17.3.3.2.1.4 Authority

The On-Site Review Committee:

- Recommends to the Nuclear Plant Manager approval or disapproval of items reviewed.
- Renders determinations with regards to whether items (1) through (3) adversely affect safety and if a Technical Specification change or NRC review is required.
- Provides written notification to the Site executive of any disagreements between the On-Site Review Committee and the Nuclear Plant Manager.

The On-Site Review Committee advises the Nuclear Plant Manager on matters related to safe operation and overall performance. The Committee has authority to obtain access to records and personnel as needed to conduct reviews.

17.3.3.2.1.5 Records

The On-Site Review Committee maintains written minutes of each Committee meeting, to include identification of items reviewed, and decisions and recommendations of the Committee. Copies of the minutes are provided to the Site executive, and to other onsite and offsite management responsible for the areas reviewed as necessary. On-Site Review Committee records are retained according to Section 17.3.2.15.

17.3.3.3 Independent Assessment

NOS is responsible for conducting independent assessments of functions and activities affecting the nuclear programs at Duke Energy Corporation locations. NOS monitors and assesses the Company's nuclear programs on a continuing basis. As part of this assessment process, NOS performs audits to verify that applicable elements of the quality assurance and other regulatory required programs have been developed, documented and effectively implemented in accordance with specified requirements. In this section, the words assess, assessment, and their various word forms are used generically to indicate the act of monitoring the performance of the line organization for indications of decline.

NOS, along with the line organization management, monitors functional areas to determine if the required levels of performance are being achieved.

The functions of NOS are to assess line organization performance including the self-assessment and corrective action process. NOS performs these monitoring activities for nuclear safety related functions in operations, engineering, and maintenance.

NOS evaluations, including the results and recommended corrective actions, are reported to senior management.

17.3.3.3.1 Organization

On an exception basis, personnel in NOS may provide assistance to the line organization by participating in emergency preparedness activities, ad hoc committees or analyzing technical issues, if such assistance is deemed to be in the overall best interest of safety and is approved in advance by NOS management.

NOS teams may include peers from other Duke Energy Corporation plants and from the nuclear utility industry, as appropriate, to lend expertise to the assessment process. When subject matter experts from the line organizations are utilized to add specific technical expertise to a specific audit team, the subject matter experts will work under the direction of the audit team leader and not evaluate any documentation for which they had direct responsibility.

Selection of personnel is based on experience and training that establishes that their qualifications are commensurate with the complexity or special nature of the area being audited. The process for qualification of personnel to perform audits is established in procedures.

17.3.3.3.2 Internal Assessment Process

The internal assessment process includes gathering data, analyzing data, focusing on selected issues and identifying deficiencies to desired performance. Data is gathered using performance based techniques during:

a) Observations of work activities
b) Interviews
c) Reviews of documents to gather information (including the use of NRC, INPO, and other agency evaluations)
d) Audits, and
e) Analysis of data and reports (including adverse condition reports, etc.)

NOS personnel have access to records, procedures, and line organization personnel to gather data.

NOS conducts observations of specific activities, and processes on the basis of their impact and importance relative to safety. The schedule is flexible and dynamic to allow the overall assessment process to be changed depending on plant conditions, events, or issues raised by senior management. Assessment activities can be focused on areas most in need of improvement.

Audits are a specific independent assessment activity performed to verify that applicable elements of the quality assurance and other regulatory required programs have been developed, documented and effectively implemented in accordance with specified requirements. Independent Audit activities are selected with flexibility based on various factors. These factors include but are not limited to: importance to safety and reliability, monitoring of performance indicators, time since last audit, plant management perspective, outside agency audits, and problem areas identified from industry and Duke Energy Corporation experience.

Audits are scheduled per the following section.

17.3.3.3.3 Internal Audit Program

The Duke Energy Corporation QAP requires a comprehensive system of planned and periodic internal audits for all phases of station operations and supporting activities.

Periodic audits of activities or records of processes (e.g., welding, maintenance, development of design, record management, or system testing), to verify compliance and effectiveness of the implementation of the QAP are performed. NOS audits are performance based and scheduled based on plant performance and importance to safety but at a frequency not to exceed twenty-four months with extensions as allowed in Section 17.3.3.3.7, Audit Frequency Extensions.

The audit system is reviewed periodically and revised as necessary to assure coverage commensurate with current and planned activities. These audits encompass:

- The conformance of facility operation to provisions contained within the Technical Specifications and applicable license conditions.
- The performance, training and qualifications of the Nuclear Generation Department.
- The results of actions taken to correct deficiencies occurring in facility equipment, structures, or systems that affect nuclear safety; or method of operation that affect nuclear safety.
- The performance of activities required by the QAP to meet the criteria of Appendix B to 10 CFR 50 for activities performed by the Nuclear Generation Department and the interfacing organizations.

- Any other area of nuclear generation considered appropriate by responsible management.
- The Radiological Environmental Monitoring Program and the results thereof.
- The Offsite Dose Calculation Manual and implementing procedures.
- The Process Control Program and implementing procedures for processing and packaging of radioactive wastes.
- The acceptability of a representative sample of station procedures, including the effectiveness of the procedure review and revision program.
- Independent Spent Fuel Storage Installation Activities (reference 10 CFR Part 72).
- Packaging of Radioactive Materials for Off-Site Shipment (reference 10 CFR Part 71).

The scope of each audit is determined by the responsible Lead Auditor, under the direction of NOS management. The lead auditor is responsible for completion of audit checklists and directing the audit team in the performance of the audit. The audit is conducted in accordance with checklists; the scope may be expanded upon by the audit team during the audit, if needed. One or more persons comprise an audit team, one of whom is a qualified lead auditor.

17.3.3.3.3.1 Other Reviews Prescribed by the Code of Federal Regulations

Other reviews prescribed by the Code of Federal Regulations are scheduled and performed per the CFR. The audit frequency extension provisions of Section 17.3.3.3.7 do not apply.

NOS performs the following reviews under the internal audit program:

a. Emergency Preparedness (per 10 CFR 50.54(t))
b. Security (per 10 CFR 50.54(p) and 10 CFR Part 73)
c. Fitness for Duty and Fatigue Rule (per 10 CFR Part 26)

The periodic review of the radiation protection program content and implementation required by 10 CFR 20.1101c may be performed by either the line organization or NOS.

17.3.3.3.3.2 Independent Audit of Fire Protection Program

For sites implementing the fire protection program under provisions of 10 CFR 50.48(c) National Fire Protection Association Standard NFPA 805:

- An independent fire protection audit is performed at least once per 36 months using an outside (external to Duke Energy Corporation) qualified fire protection engineer meeting education and experience requirements for a Professional Member of the Society of Fire Protection Engineers (SFPE).

For the remaining sites, audits of the following functions are completed within a period of 24 months:

- The Facility Fire Protection programmatic controls including the implementing documents.
- The fire protection equipment and program implementation utilizing either a qualified offsite fire protection engineer or an outside independent fire protection consultant. An outside (external to Duke Energy Corporation) qualified fire protection engineer meeting education and experience requirements for a Professional Member of the SFPE shall be used at least every 36 months.
- The audit scope may be combined into a single audit performed on a 24 month frequency with the inclusion of an outside independent qualified fire protection engineer.

17.3.3.3.4 Results

Adverse conditions are reported in accordance with the applicable corrective action program procedure.

Independent audit results are communicated to line management to allow for timely action to address potential problems or recognize strengths and superior performance.

Follow-up is accomplished to assure that corrective action is taken as a result of the audit and that deficient areas are re-audited, when necessary, to verify implementation of adequate corrective actions.

17.3.3.3.5 Supplier Oversight

Supplier QA programs are evaluated and monitored by NOS-Vendor Quality, to assure that QA requirements are met. Supplier QA programs require a system of periodic and planned supplier and sub-supplier audits conducted by persons not directly involved in the activity being audited. Supplier audits are performed on a three year frequency with extensions as allowed in Section 17.3.3.3.7, Audit Frequency Extensions.

17.3.3.3.6 Independent Audit of QA Functions

As directed by the CNO, the executive for NOS initiates a program audit of the QA Functions performed by NOS. These functions include the internal audit program, the NOS portions of the supplier oversight program, and maintenance of this document (Quality Assurance Program Description). This program audit is performed within a period of two years with extensions as allowed in Section 17.3.3.3.7 Audit Frequency Extensions.

This audit team consists of qualified individuals, none of which is from the area audited.

The audit is performed with pre-approved checklists, instructions, or plans.

The audit team conducts a post-audit conference with the responsible management of the areas audited to discuss the audit results, including deficiencies. The audit team prepares checklists and the audit report. The report is sent to the executive for NOS.

The executive for NOS and/or responsible management of the area being audited determines the need for corrective action and re-evaluation. Necessary corrective action and re-evaluation are performed as required.

Pertinent correspondence and reports related to the audit are filed.

17.3.3.3.7 Audit Frequency Extensions

Except when the frequency is specified by regulation, the following criteria for extending audit intervals apply:

1) Schedules are based on the anniversary established for each audit.
2) A maximum extension not to exceed 25 percent of the audit interval may be allowed (e.g., audits on a two year frequency may not be extended beyond 30 months, audits on an annual frequency may not be extended beyond 15 months).
3) When an audit interval extension is used, the next audit for that particular audit area is scheduled from the original anniversary.

4) Provision 2) also applies to supplier audits and evaluations except that a total combined time interval for any three consecutive inspection or audit intervals should not exceed 3.25 times the specified inspection or audit interval.

17.3.4 ADMINISTRATIVE CONTROLS RELOCATED FROM TECHNICAL SPECIFICATIONS

Consistent with NRC Administrative Letter 95-06, certain administrative controls from the original station Technical Specifications have been relocated to the Quality Assurance Program. These relocated administrative controls included technical review, independent review, 10 CFR 50.59 review, record retention, and audit requirements. This section provides references to the sections of this document where the administrative controls have been integrated with QAP controls.

17.3.4.1 Technical Reviews

This content provided requirements for technical reviews of station modifications, procedures, tests, and experiments to assure adequacy of nuclear safety related SSCs and associated activities. Those reviews are embedded in the QAP and its committed Standards. See Sections 17.3.2.2, Design Control; 17.3.2.3, Design Verification; 17.3.2.8, Test Control; and 17.3.2.14, Document Control.

As identified by procedures, technical evaluations are performed by personnel qualified in the subject matter to determine the technical adequacy and accuracy of the proposed activity. If interdisciplinary evaluations are required to cover the technical scope of an activity, they will be performed. Technical review personnel are identified by the responsible manager or his designee for a specific activity when the review process begins.

17.3.4.2 10 CFR 50.59 Reviews

The review of station modifications, procedures, tests, and experiments against the requirements of 10 CFR 50.59 is to ensure that changes requiring prior NRC approval are submitted to and approved by the NRC prior to implementation. Provisions are included in Sections 17.3.2.3 Design Verification and 17.3.2.14 Document Control to amplify the need to complete these reviews.

The program for 10 CFR 50.59 reviews is in accordance with NEI 96-07, Revision 1, "Guidelines for 10 CFR 50.59 Evaluations" as endorsed by Regulatory Guide 1.187, November 2000.

This program includes provisions to ensure that individuals have appropriate qualifications prior to completing these reviews. A list of individuals qualified to perform 50.59 evaluations is maintained for each site.

17.3.4.3 Record Retention

The list of typical operational phase records is in Section 17.3.2.15, Records.

17.3.4.4 Audit Types and Frequencies

These are addressed in Section 17.3.3.3.3, Internal Audit Program.

17.3.4.5 On-Site Review Committee

This is addressed in Section 17.3.3.2, Independent Review.

17.3.4.6 Reportable Event Action

Procedures are established to assure events are reviewed and notifications and reports are made as required by Regulations including, but not limited to, 10 CFR Part 21, 10 CFR 50.72, and 10 CFR 50.73.

These procedures require for significant incidents occurring during operation where a safety limit is exceeded, or which could otherwise be related to the nuclear safety of the station, the Site executive is notified, the event is investigated, and a report prepared. These reports:

a) Contain a summary description of the circumstances and information relating to the subject incident.
b) Contain an evaluation of the effects of the incident.
c) Describe corrective action taken or recommended as a result of the incident.
d) Describe, analyze and evaluate any significant nuclear safety related implications of the incident.

17.3.4.7 Independent Safety Engineering Group Functions

Independent Safety Engineering Group (ISEG) was addressed on a Site Specific basis for certain plants. See Site specific Attachments for additional requirements as follows:

- Attachment A, Brunswick Specific QAPD, Not Addressed.
- Attachment B, Harris Specific QAPD, Section B17.3.4.4, Independent Safety Engineering Group.
- Attachment C, Robinson Specific QAPD, Not Addressed
- Attachment D, Catawba, McGuire, and Oconee Specific QAPD, Section D17.3.4.7, Independent Safety Engineering Group

Attachment A, Brunswick Specific QAPD

Information presented in this attachment is specific to Brunswick and was contained in the UFSAR prior to Amendment 41.

Where a section contains no descriptive information beyond that in the generic text in the body of the document, a statement is made to that effect and no content is included. See A17.3.1.2, Organization for example.

A17. BNP SPECIFIC QUALITY ASSURANCE

A17.1 BNP QA DURING DESIGN AND CONSTRUCTION

See Brunswick UFSAR Chapter 17 for historic information from the description of the QA Program for design and construction.

A17.2 OPERATIONAL QA

Deleted

(NOTE: In April 1995, NRC approved the reformatting of the description of the Brunswick QA Program to follow Standard Revision Plan Section 17.3, replacing the content of 17.2.)

A17.3 BNP QUALITY ASSURANCE PROGRAM (QAP) DESCRIPTION

INTRODUCTION

This content is not addressed in SRP Section 17.3; therefore, the Brunswick description of the QA Program did not include this section.

DEFINITIONS

There are no Brunswick specific definitions.

EXPLANATION OF "QUALITY ASSURANCE"

There is no Brunswick specific content.

QA STANDARDS AND GUIDES

Table A17-1 and A17-2 address QAP conformance to the referenced regulatory and program guidance in NUREG-0800 Section 17.3.

The content of Table A17-1 was transferred from Table 1-6 of the Brunswick UFSAR. Changes to the content of Table A17-1 are controlled in accordance with 10 CFR 50.54(a). Subsequent changes to the QAP are incorporated in this document as identified in Section 17.3.1.7.

Table A17-2 addresses additional Regulatory Guides that relate to implementation of the QAP but the implementation is site specific and controlled with the Brunswick UFSAR in accordance with 10 CFR 50.59.

Table A17-1. Conformance with QA Regulatory Guides and Industry Standards

Generic Exception:

Table A17-1 addresses Brunswick's Conformance of the Quality Assurance Program to certain NRC Regulatory Guides. In so doing, specific editions of industry standards are identified for compliance with exceptions and alternatives. Those identified standards include references to other industry standards for activities including, but not limited to; design, fabrication, inspection, and testing. Those included reference industry standards are considered to be guidance documents for details of how activities may be accomplished. The actual standard to be used in such cases is controlled by each station's current licensing and design bases.

Regulatory Guide 1.28, Quality Assurance Program Requirements (Design and Construction) (Safety Guide 28 June 1972) (Rev. 0)
ANSI Standard N45.2-1971, Quality Assurance Requirements for Nuclear Power Plants
This guide, and the standard it endorses, have been superseded for operations activities by Regulatory Guide 1.33 and ANSI N18.7-1976, which it endorses. The Operational Quality Assurance Program complies with Regulatory Guide 1.33 and ANSI N18.7-1976 as stipulated in Appendix A to that Program; therefore, Regulatory Guide 1.28 (Safety Guide 28) and ANSI N45.2-1971, which it endorses, are not considered necessary and are not included as part of the program.

Regulatory Guide 1.30, Quality Assurance Requirements for the Installation, Inspection, and Testing of Instrumentation and Electrical Equipment (Safety Guide 30, Revision 0, August 1972)
ANSI Standard N45.2.4-1972 (IEEE-336-1971), Installation, Inspection, and Testing Requirements for Instrumentation and Electrical Equipment During the Construction of Nuclear Power Generating Stations
BNP 1 and 2 complies with the provisions of Regulatory Guide 1.30, August 1972, as indicated below:
The installation, inspection, and testing of nuclear power plant instrumentation and electrical equipment at BNP will be in accordance with the applicable requirements of ANSI N45.2.4-1972 with the following exceptions: 1. Section 1.4 titled Definitions: Definitions in this standard which are not included in ANSI N45.2.10 will be used; definitions which are included in ANSI N45.2.10 will be used as clarified in Brunswick commitment to Regulatory Guide 1.74. 2. Section 1.5 titled Reference Documents: Brunswick's commitment to other documents referenced in this standard shall be as stated in our commitment to that document. 3. Section 2.5 titled Measuring and Test Equipment: Brunswick will implement the applicable portions of this Section as follows: The status of portable items of measuring and test equipment and reference standards shall be identified by use of status cards, computer schedules, or tags for the date recalibration is due. These items are in a calibration program which requires recalibration on a specified frequency or, in certain cases, prior to use.

Table A17-1. Conformance with QA Regulatory Guides and Industry Standards (Continued)

Regulatory Guide 1.30, Quality Assurance Requirements for the Installation, Inspection, and Testing of Instrumentation and Electrical Equipment (Safety Guide 30, Revision 0, August 1972)
ANSI Standard N45.2.4-1972 (IEEE-336-1971), Installation, Inspection, and Testing Requirements for Instrumentation and Electrical Equipment During the Construction of Nuclear Power Generating Stations
BNP 1 and 2 complies with the provisions of Regulatory Guide 1.30, August 1972, as indicated below:

Instrumentation and electrical equipment in the categories listed below shall be in a calibration program. This program provides, by the use of status cards, computer schedules, or tags, for the date that recalibration is due and indicates the status of calibration. The identity of person(s) performing the calibration is provided on the calibration documents.

a. Instruments installed as listed in the BNP Technical Specifications
b. Installed instrumentation used to verify BNP Technical Specification parameters
c. Installed safety-related instruments and electrical equipment that provide an active function during operation or during shutdown; i.e., not a device being designated safety-related solely because the instrument is an integral part of a pressure retaining boundary.

4. Section 7 titled Data Analysis and Evaluation states in part, "Procedures shall be established for processing inspection and test data and their analysis and evaluation." At BNP 1 and 2, (data processing procedures per se have not been developed; instead, test data are recorded, processed, and analyzed in accordance with procedures and instructions in appropriate functional areas; e.g., maintenance, startup.

Regulatory Guide 1.33, Quality Assurance Program Requirements (Operation) (Safety Guide 33 November 1972)
ANSI Standard N18.7-1976, Administrative Controls and Quality Assurance for the Operational Phase of Nuclear Power Plants
BNP 1 and 2 complies with the provisions of Regulatory Guide 1.33, November 1972, and the requirements and recommendations for administrative controls described in ANSI N18.7-1976 except as stated below:

1. The requirements of Paragraph 4.3 Independent Review Program are replaced by Section 17.3.3.2, Independent Review. This exception uses NRC Safety Evaluation dated January 13, 2005 to Nuclear Management Company (ADAMS ML050210276).
2. Deleted - see exception 1.
3. Paragraph 4.5 - Written audit reports are not formally reviewed as part of the Independent Review function.
4. Paragraph 4.5 - The CNO will assure that an independent assessment of the overall Nuclear Oversight Program is conducted at least once every 24 months. Results of the independent assessment will be reported directly to the CNO and entered into the Corrective Action Program for resolution. For scheduling consistency, the exceptions included in paragraph 5 of this section will be used as clarification for scheduling this independent assessment.
5. Paragraph 4.5, Audit Program - ANSI N18.7-1976/ANS-3.2, Section 4.5 is implemented with the following clarification: The audits of selected aspects of operational phase activities as identified in Section 17.3.3.3.3, Internal Audit Program, are scheduled based on plant performance and importance to safety but at a frequency not to exceed twenty-four months with extensions as allowed in Section 17.3.3.3.7, Audit Frequency Extensions.

Table A17-1. Conformance with QA Regulatory Guides and Industry Standards (Continued)

Regulatory Guide 1.33, Quality Assurance Program Requirements (Operation) (Safety Guide 33 November 1972)
ANSI Standard N18.7-1976, Administrative Controls and Quality Assurance for the Operational Phase of Nuclear Power Plants
BNP 1 and 2 complies with the provisions of Regulatory Guide 1.33, November 1972, and the requirements and recommendations for administrative controls described in ANSI N18.7-1976 except as stated below:

6. Section 5.2.2 titled Procedure Adherence: Temporary changes to approved procedures and proposed tests or experiments may be made provided; a) the intent of the original procedure, proposed test or experiment is not altered; b) the change is approved by two members of the plant management staff, at least one of whom holds a Senior Reactor Operator License on the unit affected; and c) the change is documented and, if appropriate, reviewed and approved for incorporation in the next revision of the procedure within 14 days of implementation of the temporary change.
7. The applicable procedures recommended in Appendix "A" of Regulatory Guide 1.33, November 1972, shall be established, implemented, and maintained as specified in the BNP 1 and 2 BNP Technical Specifications.
8. Paragraph 5.2.7 - BNP will comply with requirements of the first sentence of the second paragraph and provides the following clarification:
   a. "Documented Instructions" is defined as any credible information (e.g., vendor manuals, vendor recommendations, engineering direction, etc.) Used for work planning/execution which is reviewed and approved prior to use in accordance with approved procedures.
9. Paragraph 5.2.13, titled Procurement Document Control: When purchasing commercial grade calibration services from certain accredited calibration laboratories, the procurement documents are not required to impose a quality assurance program consistent with ANSI N45.2-1971. Alternate requirements described in Section 1.8 for Regulatory Guide 1.123 may be implemented in lieu of imposing a quality assurance program consistent with ANSI N45.2-1971.
10. Section 5.2.15 titled Review, Approval and Control of Procedures, states that, "Plant procedures shall be reviewed by an individual knowledgeable in the area affected by the procedure no less frequently than every two years to determine if changes are necessary. A revision to a procedure constitutes a procedure review." In lieu of this commitment, Duke Energy addresses programmatic controls in Section 17.3.2.14 to continually identify procedure revisions which may be needed to ensure that procedures are appropriate for the circumstance and are maintained current.
11. Section 5.2.17, second to the last sentence in the last paragraph, "Deviations, their cause, and any...," to be consistent with Paragraph 5.2.11 and 10CFR 50, Appendix B, the cause of the deviation will be determined for only significant conditions adverse to safety.
12. Paragraph 5.3.5(4) last sentence - BNP interprets the review requirements for "Supporting Maintenance Documents" which have not been incorporated in a procedure, be performed in an equivalent manner as described in approved procedures.
13. Section 5.3.9.1, titled Emergency Procedure Format and Content: Emergency procedures shall be in the format as committed to in NUREG-0737, TMI Action Plan.
14. ANSI N18.7-1976, Section 5.2.16. See Section A17.3.2.9 for clarification.

Table A17-1. Conformance with QA Regulatory Guides and Industry Standards (Continued)

Regulatory Guide 1.33, Quality Assurance Program Requirements (Operation) (Safety Guide 33 November 1972)
ANSI Standard N18.7-1976, Administrative Controls and Quality Assurance for the Operational Phase of Nuclear Power Plants
BNP 1 and 2 complies with the provisions of Regulatory Guide 1.33, November 1972, and the requirements and recommendations for administrative controls described in ANSI N18.7-1976 except as stated below:
15. Section 5.3.10, first paragraph - The requirement "Test and inspection results shall be documented...," will be implemented as follows: As an alternative to the records required for inspections outlined in paragraph 5.3.10, BNP shall provide the following as the method to document results of inspections. The results of inspections will be documented in appropriate records and those records shall, as a minimum, identify a) through f) below: a) Item inspected b) Date of inspection c) Inspector d) Type of observation e) Results or acceptability f) Reference to information on action taken in connection with non-conformances.
Regulatory Guide 1.37, Quality Assurance Requirements for Cleaning of Fluid Systems and Associated Components of Water-Cooled Nuclear Power Plants (March 1973)
ANSI Standard N45.2.1-1973, Cleaning of Fluid Systems and Associated Components During Construction Phase of Nuclear Power Plants
Those areas of the QA Program applicable to onsite cleaning of materials and components, cleanliness control, and pre-operation cleaning and layup of BNP 1 and 2 fluid systems, will be in accordance with ANSI N45.2.1-1973, with the following exceptions:
1. At BNP 1 and 2, a classification system similar to ANSI N45.2.1-1973 has been developed and is fully implemented for cleaning of fluid systems. 2. Section 1.4 titled Definitions: Definitions in this standard which are not included in ANSI N45.2.10 will be used; definitions which are included in ANSI N45.2.10 will be used as clarified in BNP's commitment to Regulatory Guide 1.74. 3. Section 1.5 titled Referenced Documents: BNP's commitment to other documents referenced in this standard shall be as stated in our commitment to that document.
Regulatory Guide 1.38, Quality Assurance Requirements for Packaging Shipping Receiving Storage and Handling of Items for Water-Cooled Nuclear Power Plants (March 1973)
ANSI Standard N45.2.2-1972, Packing, Shipping, Receiving, Storage, and Handling of Items for Nuclear Power Plants
Packaging, shipping, receiving, storage, and handling of BNP items are in accordance with applicable requirements of ANSI N45.2.2-1972 with the following specific exceptions:
1. Section 1.4 titled Definitions: Definitions in this standard which are not included in ANSI N45.2.10 will be used; definitions which are included in ANSI N45.2.10 will be used as clarified in BNP's commitment to Regulatory Guide 1.74. 2. Section 1.5 titled Referenced Documents: BNP's commitment to other documents referenced in this standard shall be as stated in our commitment to that document.

Table A17-1. Conformance with QA Regulatory Guides and Industry Standards (Continued)

Regulatory Guide 1.38, Quality Assurance Requirements for Packaging Shipping Receiving Storage and Handling of Items for Water-Cooled Nuclear Power Plants (March 1973)
ANSI Standard N45.2.2-1972, Packing, Shipping, Receiving, Storage, and Handling of Items for Nuclear Power Plants
Packaging, shipping, receiving, storage, and handling of BNP items are in accordance with applicable requirements of ANSI N45.2.2-1972 with the following specific exceptions:

3. Section 2.7 titled Classification of Items and Section 6.1.2 titled Levels of Storage:
   a. Special electronic equipment and instrumentation received as assembled panels will be stored as recommended by the manufacturer and/or based on engineering evaluation to prevent damage, deterioration, or contamination, but not necessarily in a Level A storage area.
   b. Chemicals used at BNP 1 and 2 are stored at the point of use and/or in warehouse areas that satisfy the requirement of Level B storage. These storage areas have been evaluated and determined to be adequate for the limitations established by the manufacturer.
   c. Special nuclear materials are stored in areas specifically designed for such storage.
4. Paragraph 6.4.2, Care of Items: The following alternates are provided for indicated subparts:
   a. Space heaters in electrical equipment shall be energized unless a documented engineering evaluation determines that such space heaters are not required.
   b. Rotating electrical equipment, commensurate to safety or reliability, shall be given insulation resistance tests on a schedule basis, unless a documented evaluation determines that such tests are not required.
   c. Rotating equipment, commensurate to safety or reliability, shall be evaluated for shaft rotation requirements. The degree of turn shall be established so that the parts receive a coating of lubrication where applicable, and so that the shaft does not come to rest in a previous position. (90 deg. and 450 deg. rotations are examples.)
   d. Other maintenance requirements specified by the manufacturer's instructions shall be evaluated to determine applicability during storage of the item.
5. Section 7.3.4 - BNP intends to comply with the requirements of this Section with the following clarification: Test loads equal to or greater than the original crane rating shall not pass over locations where special nuclear material is stored or where reactor system components or high cost equipment are located.

Table A17-1. Conformance with QA Regulatory Guides and Industry Standards (Continued)

Regulatory Guide 1.39, Housekeeping Requirements for Water-Cooled Nuclear Power Plants (March 1973)
ANSI Standard N45.2.3-1973, Housekeeping, During the Construction Phase of Nuclear Power Plants
The applicable operational phase requirements of N45.2.3-1973 are followed at BNP within the context of the established QA Program with the following specific exception -- the zone designations of Section 2.1 of N45.2.3 and the requirements associated with each zone are considered impractical for implementation, as stated, at BNP during the operations phase. Instead, procedures or instruction for housekeeping activities, which include the applicable requirements outlined in Section 2.1 of N45.2.3, and which take into account radiation control considerations, security considerations, and cleanliness requirements, are developed on a case by case basis for work to be performed.
Regulatory Guide 1.58, Qualification of Nuclear Power Plant Inspection, Examination, and Testing Personnel (September 1980)
ANSI Standard N45.2.6-1978, Qualification of Inspection, Examination, and Testing Personnel for Nuclear Power Plants"
BNP 1 and 2 complies with NRC Regulatory Guide 1.58, September 1980, which endorses ANSI N45.2.6-1978, with the following exceptions:
1. Section 1.2 titled Applicability: BNP elects not to apply the requirements of this guide to those personnel who are involved in the daily operations of surveillance, maintenance, and certain technical and support services whose qualifications are controlled by the BNP Technical Specifications or are controlled by other QA Program commitment requirements. Only personnel in the following listed categories will be required to meet ANSI N45.2.6-1978 requirements: a. Nondestructive examination (NDE) personnel b. QC inspection personnel c. Receipt Inspection personnel 2. The fourth paragraph of Section 1.2 requires that the Standard be imposed on personnel other than BNP employees. The applicability of the Standard to suppliers and contractors will be documented and applied, as appropriate, in the procurement documents for such suppliers and contractors or in interface agreements for Duke Energy non-nuclear organizations providing services identified in Section 17.3.1.2.3. 3. Section 1.4 titled Definitions: Definitions in this Standard which are not included in ANSI N45.2.10 will be used; definitions which are included in ANSI N45.2.10 will be used as clarified in BNP's commitment to Regulatory Guide 1.74. 4. Section 2.5 titled Physical: BNP will implement the requirements of this Section with the stipulation that, where no special physical characteristics are required, none will be specified. The converse is also true: if no special physical requirements are stipulated by BNP, none are considered necessary. BNP employees receive an initial physical examination to assure satisfactory physical condition; however, only the following listed personnel will receive an annual examination: a. NDE personnel b. QC inspection personnel c. Receipt inspection personnel This annual examination shall consist of the near visual acuity using the standard Jaeger's type chart or equivalent test.

Table A17-1. Conformance with QA Regulatory Guides and Industry Standards (Continued)

Regulatory Guide 1.58, Qualification of Nuclear Power Plant Inspection, Examination, and Testing Personnel (September 1980)
ANSI Standard N45.2.6-1978, Qualification of Inspection, Examination, and Testing Personnel for Nuclear Power Plants"
BNP 1 and 2 complies with NRC Regulatory Guide 1.58, September 1980, which endorses ANSI N45.2.6-1978, with the following exceptions:
5. Section 3 titled Qualifications: Only personnel performing NDE (such as LP, MT, UT, and RT) are required to be grouped in levels of capability and certified as such. QC inspection personnel will be certified for inspection, review, and evaluation of inspection data, and reporting of inspection and test results. 6. Section 3.5 titled Education & Experience Recommendations: BNP will certify individual inspectors through training and experience to requirements appropriate to the specific assignment; however, except for NDE, personnel are not required to be classified by levels of capability. Inspection personnel may be qualified based on pre-established experience, education, on-the-job training, written examinations and proficiency tests associated with the specific activity. Proficiency tests are given to personnel performing independent QC inspections and documented acceptance criteria are developed to determine if individuals are properly trained and qualified. Certificates of qualification delineate the functions personnel are qualified to perform. Qualification records are maintained and performance evaluations conducted at least once every three years. If organizations elect to utilize qualifications by levels for non-NDE inspections, Level I inspectors receive a minimum of 4 months experience as Level I before being certified as Level II, in lieu of one year experience recommended by ANSI N45.2.6 Section 3.5.2(1). Organizations identify in their procedures if they qualify their inspectors by Level or by task qualifications. Inspectors are only assigned functions for which they have been qualified.
Regulatory Guide 1.64, Quality Assurance Requirements for the Design of Nuclear Power Plants (October 1973)
ANSI Standard N45.2.1.1-1974, Quality Assurance Requirements for the Design of Nuclear Power Plants
Those areas of the QA Program for BNP 1 and 2 applicable to design or modification of the plant are in accordance with the applicable guidance of ANSI N45.2.11-1974, with the following exception:
1. Section 1.4 titled Definitions: Definitions in this standard which are not included in ANSI N45.2.10 will be used; definitions which are included in ANSI N45.2.10 will be used as clarified in the BNP commitment to Regulatory Guide 1.74.
Regulatory Guide 1.74, Quality Assurance Terms and Definitions (February 1974)
ANSI Standard N45.2.1.0-1973, Quality Assurance Terms and Definitions
Comply with the provisions of Regulatory Guide 1.74, February, 1974.

Table A17-1. Conformance with QA Regulatory Guides and Industry Standards (Continued)

Regulatory Guide 1.88, Collection, Storage, and Maintenance of Nuclear Power Plant Quality Assurance Records (August 1974)
ANSI Standard N45.2.9-1974, Collection, Storage, and Maintenance of QA Records
The requirements for collection, storage, and maintenance of QA records at BNP will be in accordance with ANSI N45.2.9-1974 and 17.3.2.15, with the following specific exceptions:
See standard exception in Table 17-1 Regulatory Guide 1.88 for the appropriate controls on quality in the management of electronic records. 1. The document control facility at the BNP shall comply with the requirement of Regulatory Guide 1.88, October, 1976, Regulatory Position C.2 in that the facility has been specifically designed to protect the contents from fire in accordance with NFPA 232-1975, with the following exceptions/alternatives/comments: a. Records are classified as Class 1 - Vital Records in accordance with NFPA 232-1975, Chapter 5, Section 5222; however, the records that meet this classification include those determined to be QA records as defined in ANSI N45.2.9-1974, paragraph 1.4. b. The facility is constructed in accordance with NFPA 232-1975 requirements for a fire-resistive file room as defined in NFPA 232-1975, Chapter 3. The walls were designed and constructed equivalent to a four-hour barrier. The doors are four-hour rated vault doors. Penetrations for electrical service and ventilation are sealed to a rating of 3 hours to protect the vault from a fire originating outside the vault. c. Due to the construction of the facility and other safety measures described herein, the statement in NFPA 232-1975, Chapter 3, Section 3022(d), "Class 1 . . . records should not be subjected to these possibilities of destruction by fire" is deemed to be inappropriate. d. The facility is protected by a Halon fire extinguishing system, automatic door closures, and fire detection system. e. The floor of the file room is six inches higher than the floor areas outside the file room. f. The walls are reinforced concrete, ten inches thick. g. The exterior walls are totally enclosed and insulated from the outside environment and elements. h. The facility is constructed independently from the building. i. NFPA 232-1975, Chapter 3, Sections 332 and 333 describe methods for heating and ventilation. The facility will have penetrations in the wall for the purposes of heating and ventilation. The facility is equipped with a Heating, Ventilating and Air Conditioning system external to the file room with automatic closing dampers. "The temperature and humidity should be controlled between 65 and 75 degrees and 20 and 40 percent, respectively. Temporary operation outside this range is acceptable during extreme low outside relative humidity conditions which have shown to drop the vault humidity below 20 percent. Humidity above the upper 40 percent range is acceptable during maintenance. The above times are short in duration and the humidity change is gradual. Evaluation for out of tolerance conditions will be performed. Corrective actions or compensatory measures will be taken if required, to ensure there is no adverse impact on storage of records and to restore the vault to prescribed conditions." j. 120 VAC wall outlets are provided in the file room for emergency lighting and janitorial needs. These outlets may be de-energized from a disconnect box installed on the outer wall of the records storage facility. The lighting may be disconnected outside the room and is equipped with a red pilot light. k. BNP QA records not stored in the facility described above may be retained at off-site locations which meet the requirements (with approved exceptions as necessary) of Section 5.6, ANSI 45.2.9-1974.

Table A17-1. Conformance with QA Regulatory Guides and Industry Standards (Continued)

Regulatory Guide 1.88, Collection, Storage, and Maintenance of Nuclear Power Plant Quality Assurance Records (August 1974)
ANSI Standard N45.2.9-1974, Collection, Storage, and Maintenance of QA Records
The requirements for collection, storage, and maintenance of QA records at BNP will be in accordance with ANSI N45.2.9-1974 and 17.3.2.15, with the following specific exceptions:

2. Paragraph 1.4, Definitions: The phrase "when the document has been completed" is clarified to mean when the document has received the final review performed by the organizational element responsible for generating or collecting the records. In the case of a record package made up of several individual documents, the package will be considered to be the document for the purpose of determining when the record is complete.
3. Paragraph 3.2.1, Generation of Quality Assurance Records: The phrase "completely filled out" is clarified to mean that sufficient information is recorded to fulfill the intended purpose of the record.
4. Paragraph 4.2, Timeliness: BNP's contractual agreement with its contractors and suppliers will constitute fulfillment of the requirements of this paragraph.
5. Paragraph 5.4, Preservation: The following clarification is substituted for the current subparagraph 5.4.2: "Records shall not be stored loosely. They shall be secured for storage in file cabinets or on shelving in containers." The following clarification is substituted for the current subparagraph 5.4.3: "Appropriate provisions shall be made for special processed records (such as radiographs, photographs, negatives, microfilm and magnetic media) to prevent or minimize damage for excessive light, stacking, electromagnetic fields, temperature and humidity, etc. Manufacturer's recommendations will be considered as appropriate."
6. Paragraph 5.6, Facility: This paragraph provides no distinction between temporary and permanent facilities. To cover temporary storage, the following clarification is added: "Complete records may be stored in one-hour fire rated file cabinets until transmitted for permanent storage. In general, records shall not be maintained in temporary storage by the generating organization for more than 90 days after completion. Any exceptions to this requirement must be justified, evaluated and approved by the Document Management Supervisor and documented. A list of exceptions shall be maintained and available for NRC review. Exceptions may include records needed on a continuing basis for an extended period of time at the location of the work group responsible for generating the records and records which are cumulative in nature and could best be turned over for storage for a designated period of time.
   In addition, Document Management & Information Services will store records in one- hour rated file cabinets while the records are being processed for permanent storage.
7. See standard exception in Table 17-1 Regulatory Guide 1.88 for the appropriate controls on quality in the management of electronic records.

Table A17-1. Conformance with QA Regulatory Guides and Industry Standards (Continued)

Regulatory Guide 1.94, Quality Assurance Requirements for Installation, Inspection, and Testing of Structural Concrete and Structural Steel During the Construction Phase of Nuclear Power Plants (Rev. 1, April 1976)
ANSI Standard N45.2.5-1974, Supplementary Quality Assurance Requirements for Installation Inspections and Testing of Structural Steel During the Contract Phase of Nuclear Power Plants
Regulatory Guide 1.94, Revision 1, April 1976 endorses ANSI N45.2.5-1974. BNP 1 and 2 do not commit to Regulatory Guide 1.94 but do endorse parts of ANSI N45.2.5-1974 as described below.
The original specification requirements, applicable guidance contained in ANSI N45.2.5-1974, or acceptable alternatives based on an engineering evaluation will be utilized in the event future structural work is to be performed which falls under the established requirements of the BNP QA Program.
Regulatory Guide 1.116, QA Requirements for Installation, Inspection, and Testing of Mechanical Equipment and Systems (June 1976)
ANSI Standard N45.2.8-1975, Supplementary Quality Assurance Requirements for Installation, Inspection, and Testing of Mechanical Equipment and Systems for the Construction Phase of Nuclear Power Plants
Regulatory Guide 1.116, June 1976, endorses ANSI N45.2.8-1975. BNP 1 and 2 does not commit to Regulatory Guide 1.116 but does endorse parts of ANSI N45.2.8-1975 as described below.
Within the context of the established QA Program, the applicable guidance contained in ANSI N45.2.8-1975 will be utilized in relation to mechanical maintenance or modification with the following exceptions: 1. Section 1.4 titled Definitions: Definitions in this standard which are not included in ANSI N45.2.10 will be used; definitions which are included in ANSI N45.2.10 will be used as clarified in BNP's commitment to Regulatory Guide 1.74. 2. Section 1.5 titled Referenced Documents: BNP's commitment to other documents referenced in this standard shall be as stated in our commitment to that document. 3. Section 2.8 titled Measuring and Test Equipment: BNP will implement the applicable portions of this Section as follows: a. The status of portable items of measuring and test equipment and reference standards shall be identified by use of status cards, computer schedules, or tags for the date recalibration is due. These items are in a calibration program which requires recalibration on a specified frequency or, in certain cases, prior to use. b. Instrumentation and electrical equipment in the categories listed below shall be in a calibration program. This program provides, by the use of status cards, computer schedules, or tags, for the date that recalibration is due and indicates the status of calibration. The identity of person(s) performing the calibration is provided on the calibration documents. 1) Instruments installed as listed in the BNP Technical Specifications 2) Installed instrumentation used to verify BNP Technical Specification parameters

Table A17-1. Conformance with QA Regulatory Guides and Industry Standards (Continued)

Regulatory Guide 1.116, QA Requirements for Installation, Inspection, and Testing of Mechanical Equipment and Systems (June 1976)
ANSI Standard N45.2.8-1975, Supplementary Quality Assurance Requirements for Installation, Inspection, and Testing of Mechanical Equipment and Systems for the Construction Phase of Nuclear Power Plants
Regulatory Guide 1.116, June 1976, endorses ANSI N45.2.8-1975. BNP 1 and 2 does not commit to Regulatory Guide 1.116 but does endorse parts of ANSI N45.2.8-1975 as described below.

3) Installed safety-related instruments and electrical equipment that provide an active function during operation or during shutdown; i.e., instead of being designated safety-related solely because the instrument is an integral part of a pressure retaining boundary,

4. Section 6 titled Data Analysis and Evaluation states in part, "Procedures shall be established for processing inspection and test data and their analysis and evaluation."

   At BNP 1 and 2, data processing procedures per se have not been developed; instead, test data are recorded, processed, and analyzed in accordance with procedures and instructions in appropriate functional areas; e.g., maintenance, startup.

Regulatory Guide 1.123, "Quality Assurance Requirement for Control or Procurement of Items and Services for Nuclear Power Plants"
ANSI Standard N45.2.13, "Quality Assurance Requirements for Control or Procurement of Items and Services for Nuclear Power Plants" (Draft 2, Rev. 4, April 1974)
BNP does not commit to Regulatory Guide 1.123; however, the applicable guidance contained in ANSI N45.2.13 (Draft 2, Revision 4, April 1974) and ANSI N18.7-1976, will be utilized in relation to procurement of items and services performed under the established requirements of the QA Program.
See standard exceptions in Table 17-1 for Regulatory Guide 1.123 for the procurement of Commercial Grade Items and Services including, purchasing commercial-grade calibration services from calibration laboratories.

Regulatory Guide 1.144, Auditing of Quality Assurance Programs for Nuclear Power Plants (January 1979)
ANSI Standard N45.2.12-1977, Requirements for Auditing of Quality Assurance Programs for Nuclear Power Plants
BNP will follow the requirements and recommendations of Regulatory Guide 1.144 and ANSI Standard N45,2.12, with the following clarifications:

1. BNP will follow the requirements and recommendations of Regulatory Guide 1.144, paragraphs C.1, C.2, C.3.a.2, C.3.b, and C.4. BNP's position on paragraph C.3.a.1 is as follows:

   Audits of operational phase activities, as outlined in Section 17.3.3.3 shall be performed at the frequencies stated in exception 5 for RG 1.33 in Table A17-1.

   See standard exceptions in Table 17-1 for Regulatory Guide 1.123 for the procurement of Commercial Grade Items and services including, purchasing commercial-grade calibration services from calibration laboratories.

Table A17-1. Conformance with QA Regulatory Guides and Industry Standards (Continued)

Regulatory Guide 1.144, Auditing of Quality Assurance Programs for Nuclear Power Plants (January 1979)
ANSI Standard N45.2.12-1977, Requirements for Auditing of Quality Assurance Programs for Nuclear Power Plants
BNP will follow the requirements and recommendations of Regulatory Guide 1.144 and ANSI Standard N45,2.12, with the following clarifications:

2. (Deleted)
3. BNP will comply with the last paragraph of Section 4.4 of ANSI N45.2.12 concerning issuing audit reports, with the following clarification: "Audit reports shall be issued within thirty working days after the last day of the audit. The last day of the audit shall be considered to be the day of the post-audit conference. If a post-audit conference is not held because it was deemed unnecessary, the last day of the audit shall be considered to be the date the post-audit conference was deemed unnecessary as documented in the audit report."
4. ANSI N45.2.12 Paragraph 4.3.1, Preaudit Conference: BNP will comply with the requirement of this paragraph by inserting the word "Normally" at the beginning of the first sentence. This clarification is required because, in the case of certain unannounced audits or audits of a particular operation or work activity, a preaudit conference might interfere with the spontaneity of the operation or activity being audited. In other cases, persons who should be present at a preaudit conference may not always be available. Such lack of availability should not be an impediment to beginning an audit. Even in the above examples, which are not intended to be all inclusive, the material set forth in paragraph 4.3.1 will normally be covered during the course of the audit.
5. ANSI N45.2.12 Paragraph 4.3.3, Post Audit Conference: BNP will substitute and comply with the following paragraphs:
   For all external audits, a post audit conference shall be held with management of the audited organization to present audit findings and clarify misunderstandings. Where no adverse findings exist, this conference may be waived by management of the audited organization. Such waiver shall be documented in the audit report. For all internal audits, unless unusual operating or maintenance conditions preclude attendance by appropriate managers/supervisors, an audit exit shall be held with managers/supervisors. If there are no adverse findings, management of the audited organization may waive the audit exit. Such waiver shall be documented in the audit report.
6. ANSI N45.2.12 Paragraph 4.4, Reporting:
   a. This paragraph requires that the audit report be signed by the audit team leader which is not always the most expeditious route for the audit report to be issued as soon as possible. BNP will comply with Paragraph 4.4 as clarified to read:
      An audit report shall be signed by the audit team leader or the leader's supervisor in the absence of the audit team leader. In cases where the audit report is not signed by the audit team leader due to the leader's absence, the record copy of the report must be signed by the audit team leader upon return. The report shall not require the audit team leader's review/concurrence/signature if the audit team leader is no longer employed by BNP at the time audit report is issued. The audit report shall provide:
   b. BNP will comply with subparagraph 4.4.3 clarified to read: "Supervisory level personnel with whom significant discussions were held during the course of preaudit (where conducted), audit, and post audit (where conducted) activities.
   c. Subparagraph 4.4.6 requires audit reports to include recommendations for corrective actions. BNP may choose not to comply with this requirement. Instead, BNP audit reports are required to document findings.

Table A17-1. Conformance with QA Regulatory Guides and Industry Standards (Continued)

Regulatory Guide 1.146, Qualification of Quality Assurance Program Audit Personnel for Nuclear Power Plants (Rev. 0 August 1980)
ANSI Standard N45.2.23-1978, Qualification of Quality Assurance Program Audit Personnel for Nuclear Power Plants
BNP 1 and 2 complies with NRC Regulatory Guide 1.146, Revision 0, which endorses ANSI N45.2.23-1978, with the following exceptions:

1. Section 1.4 titled Definitions: Definitions in this Standard which are not included in ANSI N45.2.10 will be used; "Audit" which is included in ANSI N45.2.10 will be used as clarified in BNP's commitment to Regulatory Guide 1.74.
2. Section 2.2 titled Qualification of Auditors: Subsection 2.2.1 references an ANSI B45.2 which will be assumed to be N45.2. BNP will comply with an alternate subsection 2.2.1 which reads:
   Orientation to provide a working knowledge and understanding of the BNP Quality Assurance Program, including the Regulatory Guides and ANSI standards included in the Program, and BNP procedures for performing audits and reporting results.
3. (Deleted)
4. Section 4.1 titled Organizational Responsibility: BNP will comply with this Section with the substitution of the following sentence in place of the last sentence in the Section:

   Management or the Audit/NOS Team Leader shall, prior to commencing the audit, assign personnel who collectively have experience or training commensurate with the scope, complexity, or special nature of the activities to be audited.
5. Section 5.3 titled Updating of Lead Auditors' Records: BNP will substitute the following sentence for this Section:

   Records for each Lead Auditor shall be maintained and updated during the annual management assessment as defined in Section 3.2 (as clarified).
6. Section 5.4 titled Record Retention: BNP will substitute the following sentence for this Section:
   Qualification records shall be retained as required by the BNP Quality Assurance Program.
7. ANSI N45.2.23-1978, Section 2.3.4 titled Audit Participation: BNP will substitute the following for this Section:

   Prospective Lead Auditors shall demonstrate the ability to effectively implement the audit process and effectively lead an audit team. This process is described in written procedures which provide for evaluation and documentation of the results of this demonstration. In addition, the prospective Lead Auditor shall have participated in at least two Nuclear Oversight audits within the year preceding the individual's effective date of qualification. Upon successful demonstration of the ability to effectively implement the audit process and effectively lead audits, and having met the other provisions of Section 2.3 of ANSI/ASME N45.2.23-1978, the individual may be certified as being qualified to lead audits.

Table A17-2. Site Specific Response to Regulatory Guides and Industry Standards

Table A17-2 identifies additional Regulatory Guides addressing subjects related to implementation of the QAP but the implementation is site specific and controlled with the UFSAR in accordance with 10 CFR 50.59.

Regulatory Guide 1.8, Personnel Selection and Training
Personnel selection and training is site specific. Brunswick addresses conformance with Regulatory Guide 1.8 (SAFETY GUIDE 8, MARCH 1971) in UFSAR Chapter 1 Table 1-6.

Regulatory Guide 1.26, Quality Group Classifications and Standards for Water-, Steam-, and Radioactive-Waste-Containing Components of Nuclear Power Plants
Quality group classifications and standards trace to the original design and construction of the nuclear power plant and therefore are site specific. Brunswick does not address Regulatory Guide 1.26 in UFSAR Chapter 1 Table 1-6. Quality group classifications are addressed in UFSAR Chapter 3.

Regulatory Guide 1.29, Seismic Design Classification
Seismic design classification trace to the original design and construction of the nuclear power plant and therefore is site specific. Brunswick addresses conformance with Regulatory Guide 1.29 in UFSAR Chapter 1 Table 1-6.

Regulatory Guide 1.36, Nonmetallic Thermal Insulation for Austenitic Stainless Steel
Nonmetallic thermal insulation for austenitic stainless steel trace to the original design and construction of the nuclear power plant and therefore is site specific. Brunswick does not address conformance with Regulatory Guide 1.36 in UFSAR Chapter 1 Table 1-6. Thermal insulation for austenitic stainless steel is addressed in UFSAR Section 5.2.

Regulatory Guide 1.54, Quality Assurance Requirements for Protective Coatings Applied to Water-Cooled Nuclear Power Plants
Quality assurance requirements for protective coatings applied to water-cooled nuclear power plants trace to the original design and construction of the nuclear power plant and therefore is site specific. Brunswick addresses conformance with Regulatory Guide 1.54 in UFSAR Chapter 1 Table 1-6.

Table A17-2. Site Specific Response to Regulatory Guides and Industry Standards (Continued)

Regulatory Guide 1.143, Design Guidance for Radioactive Waste Management Systems, Structures, and Components Installed in Light-Water-Cooled Nuclear Power Plants
Design guidance for radioactive waste management systems, structures, and components installed in light-water-cooled nuclear power plants trace to the original design and construction of the nuclear power plant and therefore is site specific. Brunswick does not address conformance with Regulatory Guide 1.143 in UFSAR Chapter 1 Table 1-6. Design guidance for radioactive waste management systems, structures, and components is addressed in UFSAR Chapter 11.

Regulatory Guide 1.155, Station Blackout
Addressing Station Blackout is site specific. Brunswick addresses conformance with Regulatory Guide 1.155 in UFSAR Chapter 1 Table 1-6.

Regulatory Guide 4.15, Quality Assurance for Radiological Monitoring Programs (Normal Operations) – Effluent Streams and the Environment
Quality assurance for radiological monitoring program (normal operations) – effluent streams and the environment is site specific. Brunswick does not address conformance to Regulatory Guide 4.15 in UFSAR Chapter 1 Table 1-6. The radiological monitoring program is addressed in UFSAR Chapter 11.

A17.3.1 MANAGEMENT

A17.3.1.1 Methodology

There are no Brunswick specific amplifications for this section.

A17.3.1.2 Organization

There are no Brunswick specific amplifications for this section.

A17.3.1.3 Responsibility

There are no Brunswick specific amplifications for this section.

A17.3.1.4 Authority

The program and procedures require that the authority and duties of persons and organizations performing activities affecting quality functions be clearly established and delineated in writing and that these individuals and organizations have sufficient authority and organizational freedom to:

1. Identify quality, nuclear safety, and performance problems.
2. Order unsatisfactory work to be stopped and control further processing, delivery, or installation of nonconforming material.
3. Initiate, recommend, or provide solutions for conditions adverse to quality.
4. Verify implementation of solutions.

A17.3.1.5 Personnel Training and Qualification

There are no Brunswick specific amplifications for this section.

A17.3.1.6 Corrective Action

The program requires that an evaluation of adverse conditions such as conditions adverse to quality, nonconformances, failures, malfunctions, deficiencies, deviations, and defective material and equipment is conducted to determine need for corrective action.

Conditions adverse to quality are identified through inspections, assessments, tests, checks, and review of documents.

The program requires corrective action to be initiated to preclude recurrence of significant conditions adverse to quality.

Procedures require follow-up reviews, verifications, inspections, etc., to be conducted to verify proper implementation of corrective action and to close out the corrective action documentation.

The program outlines the methodology for resolution of disputes involving quality and nuclear safety issues arising from a difference of opinion between identifying personnel and other groups.

Significant conditions adverse to quality are reported to appropriate management for review and evaluation.

Periodic review and evaluation of adverse trends are performed by management.

A17.3.1.7 Regulatory Commitments

Written procedures shall be established, implemented, and maintained to ensure implementation of the Process Control Program.

A17.3.2 PERFORMANCE/VERIFICATION

A17.3.2.1 Methodology

There are no Brunswick specific amplifications for this section.

A17.3.2.2 Design Control

There are no Brunswick specific amplifications for this section.

A17.3.2.3 Design Verification

There are no Brunswick specific amplifications for this section.

A17.3.2.4 Procurement Control

Potential contractors and suppliers are evaluated prior to award of a procurement contract when needed to assure the contractor's or supplier's capability to comply with applicable technical and quality requirements.

Procurement documents, such as purchase specifications, contain or reference the following:

1. Technical, administrative, regulatory, and reporting requirements, including material and component identification requirements, drawings, specifications, codes and industrial standards, test and inspection requirements, and special process instructions.
2. Identification of the documentation to be prepared, maintained, or submitted (as applicable) to BNP for review and approval. These documents may include, as necessary, inspection and test records, qualification records, or code required documentation.
3. Identification of those records to be retained, controlled, and maintained by the supplier, and those delivered to the purchaser prior to use or installation of the hardware.

Procurement documents require suppliers to operate in accordance with QA programs which are compatible with the applicable requirements of the QA Program and procedures where their services are utilized in support of plant activities.

A17.3.2.5 Procurement Verification

There are no Brunswick specific amplifications for this section.

A17.3.2.6 Identification and Control of Items

Procedures require that materials, parts, and components be identified and controlled to prevent the use of incorrect or defective items. These procedures also require that identification of items be maintained either on the item in a manner that does not affect the function or quality of the item, or on records traceable to the item.

Procedures implementing these requirements provide for the following:

1. Verification that items received at the plant are properly identified and can be traced to the appropriate documentation, such as drawings, specifications, purchase orders, manufacturing and inspection documents, nonconformance reports, or material test reports.
2. Verification of item identification consistent with the BNP inventory control system and traceable to documentation which identifies the proper uses or applications of the item.

A17.3.2.7 Handling, Storage, and Shipping

Provisions are established to control the shelf life and storage of chemicals, reagents, lubricants, and other consumable materials.

A17.3.2.8 Test Control

Test procedures incorporate or reference the following, as required:

1. Instructions and prerequisites for performing the test,
2. Use of proper test equipment,
3. Mandatory inspection hold points,
4. Acceptance criteria

Test results are documented, evaluated, and their acceptability determined by a qualified, responsible individual or group.

When the acceptance criteria are not met, affected areas are to be retested or evaluated, as appropriate.

A17.3.2.9 Measuring and Test Equipment Control

Portable measuring and test equipment are calibrated by standards at least four times as accurate as the portable measuring and test equipment, unless limited by the state of the art.

Special tools such as torque wrenches, calipers, and micrometers are calibrated to be at least as accurate as the application(s) for which it is used, using standards which are at least as accurate as the special tool being calibrated.

Installed measuring and test instruments are calibrated by instruments at least as accurate as the installed, unless limited by the state of the art.

Reference and transfer standards are traceable to nationally recognized standards; or where national standards do not exist, provisions are established to document the basis for the calibration.

A17.3.2.10 Inspection Test and Operating Status

These procedures include the application, removal, and verification of inspection and welding stamps, or other status indicators as appropriate.

Altering the sequence of required tests, inspections, and safety-related operations can only be accomplished by methods outlined in procedures.

A17.3.2.11 Special Process Control

There are no Brunswick specific amplifications for this section.

A17.3.2.12 Inspection

There are no Brunswick specific amplifications for this section.

A17.3.2.13 Corrective Action

The primary goal of the BNP corrective action program is to improve overall plant operations and performance by identifying and correcting root causes of equipment and human performance problems.

Procedures define requirements for a corrective action program that charges personnel working at or supporting the nuclear plants with the responsibility to identify adverse conditions (including conditions adverse to quality).

Procedures include requirements for verification of the acceptability of the rework/repair of items by re-inspection and/or testing in accordance with the original inspection or test requirements or by an accepted alternative inspection and testing method.

Conditions that require rework/repairs are identified through the use of maintenance work request forms.

A17.3.2.14 Control of Documents

Changes to documents are reviewed and approved by the same organization that performed the original review and approval or by other designated qualified responsible organizations.

A17.3.2.15 Records

The structure in which single copy records are maintained is designed to prevent destruction, deterioration or theft. This structure ensures protection against destruction by fire, flooding, theft and deterioration by the environmental conditions of temperature and humidity.

A17.3.2.16 Record Retention

A list of typical operational phase QA Records is included in 17.3.2.15.

A17.3.3 ASSESSMENT

A17.3.3.1 Methodology

There are no Brunswick specific amplifications for this section.

A17.3.3.2 Independent Review

There are no Brunswick specific amplifications for this section.

A17.3.3.3 Independent Assessment

There are no Brunswick specific amplifications for this section.

A17.3.3.3.1 Organization

There are no Brunswick specific amplifications for this section.

A17.3.3.3.2 Internal Assessment Process

There are no Brunswick specific amplifications for this section.

A17.3.3.3.3 Internal Audit Program

A17.3.3.3.3.1 Other Reviews Prescribed by the Code of Federal Regulations

There are no Brunswick specific amplifications for this section.

A17.3.3.3.3.2 Independent Audit of Fire Protection Program

There are no Brunswick specific amplifications for this section.

A17.3.3.3.4 Results

There are no Brunswick specific amplifications for this section.

A17.3.3.3.5 Supplier Oversight

There are no Brunswick specific amplifications for this section.

A17.3.3.3.6 Independent Audit of QA Functions

There are no Brunswick specific amplifications for this section.

A17.3.3.3.7 Audit Frequency Extensions

There are no Brunswick specific amplifications for this section.

A17.3.4 REVIEW AND AUDIT

A17.3.4.1 Procedures, Tests, and Experiments

1. The procedures established, implemented, and maintained for the Quality Assurance Program for effluent and environmental monitoring use the guidance in Regulatory Guide 1.21, Revision 1, June 1974 and Regulatory Guide 4.1, Revision 1, April 1975.
2. See Section 17.3.2.14 for required reviews for changes to procedures, tests, and experiments.

A17.3.4.2 Modifications

There are no Brunswick specific amplifications for this section. See Section 17.3.2.2 for reviews required for modifications.

A17.3.4.3 Operating License/BNP Technical Specifications

1. Operating License/BNP Technical Specification changes shall be processed in accordance with 10CFR 50.90.
2. Operating License/BNP Technical Specification change requests shall be reviewed by the On-Site Review Committee in accordance with Section 17.3.3.2.
3. Changes to the 61BTH Independent Spent Fuel Storage Installation (ISFSI) BNP Technical Specifications and License are processed by Transnuclear, Inc., and will only be reviewed by the On-Site Review Committee if a plant-specific safety issue is identified.

A17.3.4.4 10CFR 50.59 Evaluations and Independent Review Control

There are no Brunswick specific amplifications for this section. See Section 17.3.4.2, 10 CFR 50.59 Reviews.

A17.3.4.5 Nuclear Reviewers

There are no Brunswick specific amplifications for this section. Technical reviewer qualifications are addressed in Section 17.3.4.1, Technical Reviews and 10 CFR 50.59 evaluator qualifications are addressed in Section 17.3.4.2, 10 CFR 50.59 Reviews.

A17.3.4.6 Plant Nuclear Safety Committee

This content is addressed in Section 17.3.3.2, Independent Review.

Attachment B, Harris Specific QAPD

Information presented in this attachment is specific to Harris and was contained in the UFSAR prior to Amendment 41.

Where a section contains no descriptive information beyond that in the generic text in the body of the document, a statement is made to that effect and no content is included. See B17.3.1.2, Organization for example.

B17. QUALITY ASSURANCE

B17.1 QA DURING DESIGN AND CONSTRUCTION

See Harris UFSAR Chapter 17 for historic information from the description of the QA Program for design and construction.

B17.2 OPERATIONAL QA

Deleted

(NOTE: In April 1995, NRC approved the reformatting of the description of the Harris QA Program to follow Standard Revision Plan Section 17.3, replacing the content of 17.2.)

B17.3 HNP QUALITY ASSURANCE PROGRAM (QAP) DESCRIPTION

INTRODUCTION

This content is not addressed in SRP Section 17.3; therefore, the Harris description of the QA Program did not include this section.

DEFINITIONS

Harris specific definitions are found in Table B17.1 addressing conformance with Regulatory Guide 1.74, Quality Assurance Terms and Definitions.

EXPLANATION OF "QUALITY ASSURANCE"

There is no Harris specific content.

QA STANDARDS AND GUIDES

Table B17-1 and B17-2 address QAP conformance to the referenced regulatory and program guidance in NUREG-0800 Section 17.3.

The content of Table B17-1 was transferred from Section 1.8 of the Harris UFSAR. Changes to the content of Table B17-1 are controlled in accordance with 10 CFR 50.54(a). Subsequent changes to the QAP are incorporated in this document as identified in Section 17.3.1.7.

Table B17-2 addresses additional Regulatory Guides that relate to implementation of the QAP but the implementation is site specific and controlled with the Harris UFSAR in accordance with 10 CFR 50.59.

Table B17-1. Conformance with QA Regulatory Guides and Industry Standards

Generic Exception:

Table B17-1 addresses Harris's Conformance of the Quality Assurance Program to certain NRC Regulatory Guides. In so doing, specific editions of industry standards are identified for compliance with exceptions and alternatives. Those identified standards include references to other industry standards for activities including, but not limited to; design, fabrication, inspection, and testing. Those included reference industry standards are considered to be guidance documents for details of how activities may be accomplished. The actual standard to be used in such cases is controlled by each station's current licensing and design bases.

Regulatory Guide 1.28, Quality Assurance Program Requirements (Design and Construction) (Rev 0)
ANSI N45.2-1971, Quality Assurance Program Requirements for Nuclear Power Plants
For those activities performed under operating license, HNP shall comply with the requirements of Regulatory Guide 1.33 as specified in Harris Nuclear Plant's (HNP)'s position on Regulatory Guide 1.33. Regulatory Guide 1.28 is not considered necessary and is not included as part of the operational QA program.
Regulatory Guide 1.30, Quality Assurance Requirements for the Installation and Testing of Instrumentation and Electric Equipment (Rev. 0)
HNP complies with the requirements of ANSI N45.2.4-1972), Installation, Inspection, and Testing Requirements for Instrumentation and Electrical Equipment During the Construction of Nuclear Power Generating Stations, as it is endorsed by Regulatory Guide 1.30 with the following clarifications:
1. Paragraph 2.1, planning: requirements, as determined by responsible plant management, will be incorporated into procedures. 2. Paragraphs 2.2 and 2.3; prerequisites, procedures, and instructions: these controls will be implemented as determined by responsible plant management in approved procedures. 3. Paragraph 2.4, results, will be implemented as set forth in 17.3.2.12 and by compliance with Regulatory Guide 1.33. 4. Paragraph 2.5, measuring and test equipment, will be implemented as set forth in 17.3.2.9 in lieu of the requirements set forth in this paragraph. 5. Paragraph 3, preconstruction verification: "approved instructions" are interpreted to include vendor manuals. 6. Paragraph 4, installation, will be implemented by inclusion of requirements in modification or maintenance procedures, where such procedures are used. Standard HNP practices require that appropriate care be exercised whether a procedure is required or not. 7. Paragraph 5.1, inspections, including subparagraphs 5.1.1, 5.1.2, and the first sentence in 5.1.3, will be implemented as set forth in 17.3.2.12. The remaining sentence in 5.1.3 is covered in equivalent detail by HNP's commitment to Regulatory Guide 1.33, paragraph 5.2.6; the requirements as set forth in that commitment will be implemented in lieu of the requirements stated here. 8. Paragraph 5.2, tests, including subparagraphs 5.2.1 through 5.2.3, will be implemented as set forth in 17.3.2.8. The test program will consider the elements outlined in this paragraph when developing test requirements for inclusion in maintenance and modification procedures. In some cases, testing requirements may be met by post-installation surveillance testing in lieu of a special post-installation test.

Table B17-1. Conformance with QA Regulatory Guides and Industry Standards (Continued)

Regulatory Guide 1.30, Quality Assurance Requirements for the Installation and Testing of Instrumentation and Electric Equipment (Rev. 0)

HNP complies with the requirements of ANSI N45.2.4-1972), Installation, Inspection, and Testing Requirements for Instrumentation and Electrical Equipment During the Construction of Nuclear Power Generating Stations, as it is endorsed by Regulatory Guide 1.30 with the following clarifications:

9. Paragraph 6, post-construction verification, is not generally considered applicable at operating facilities because of the scope of the work and the relatively short interval between installation and operation.
10. Paragraph 6.2.1 titled equipment tests: the last paragraph of this section deals with tagging and labeling. HNP will comply with an alternate last paragraph which reads: "Each safety-related component of process instrumentation is identified with a unique number. This number is utilized in instrument maintenance records so that current calibration status, including data such as the date of the calibration and identity of person that performed the calibration, can be readily determined. Such information may also be contained on tags or labels which may be attached to installed instrumentation."
11. Paragraph 7, data analysis and evaluation, will be implemented as stated with adding the clarifying phrase "when used" at the beginning of that paragraph. The plant shall have procedures, to the extent determined by responsible plant management, for the performance of analyzing test data, but these procedures are not referred to as data processing procedures.

Regulatory Guide 1.33, Quality Assurance Program Requirements (Rev. 2) (Operation)

HNP complies with this guide, which endorses ANSI N18.7-1976, Administrative Controls and Quality Assurance for the Operational Phase of Nuclear Power Plants, with the following clarifications:

1. Paragraph 1,"Scope", recommends that this standard applies to activities other than those associated with safety related equipment, activities, and procedures. ANSI N18.7-1976 has not fully taken into account the requirements of regulations other than 10CFR 50. Conflicts may exist between ANSI N18.7-1976 and those other regulations, such as OSHA, 10CFR 19, 20, 21, 30, 40, 70, 71, 73, and ASME. Therefore, HNP shall apply ANSI N18.7-1976 only to those plant features addressed in Section 3.2 of the HNP UFSAR that are classified as safety-related and under the control of the QA program.
2. Written audit reports are not formally reviewed as part of the independent review function.
3. The CNO will assure that an independent assessment of the overall nuclear oversight program is conducted at least once every 24 months. Results of the independent assessment will be reported directly to the CNO and entered into the corrective action program for resolution. (for scheduling consistency, the exceptions included in paragraph 18 of this section will be used as clarification for scheduling this independent assessment).
4. Paragraph 5.2.6, Equipment Control: HNP will comply with the "independent verification" requirements based on the definition of this phrase as given under the commitment to Regulatory Guide 1.74.
   Since HNP sometimes uses descriptive names to designate equipment, the sixth paragraph, second sentence is replaced with: "Suitable means include identification numbers or other descriptions which are traceable to records of the status of inspections and tests.
   The first sentence in the seventh paragraph will be complied with after clarifying "operating personnel" to mean trained employees assigned to, or under the control of, Duke Energy management at an operating nuclear facility.

Table B17-1. Conformance with QA Regulatory Guides and Industry Standards (Continued)

Regulatory Guide 1.33, Quality Assurance Program Requirements (Rev. 2) (Operation)
HNP complies with this guide, which endorses ANSI N18.7-1976, Administrative Controls and Quality Assurance for the Operational Phase of Nuclear Power Plants, with the following clarifications:

5. Paragraph 5.2.7, Maintenance and Modification: since some emergency situations could arise which preclude preplanning of all activities, HNP will comply with an alternate to the first sentence in the second paragraph which reads:
   "Except in emergency or abnormal operating conditions where immediate actions are required to protect the health and safety of the public, to protect equipment or personnel, or to prevent the deterioration of plant conditions to a possible unsafe or unstable level, maintenance or modification of equipment shall be preplanned and performed in accordance with written procedures. Where written procedures would be required and are not used, the activities that were accomplished shall be documented after the fact and receive the same degree of review as if they had been preplanned." where procedures are not available, documented instructions may be used to perform maintenance and modification activities. "Documented instructions" are defined as any credible information (e.g., vendor manuals, vendor recommendations, engineering direction etc.) used during work planning/execution which is reviewed and approved prior to use in accordance with approved procedures. Paragraph 5.2.7.1, Maintenance Programs: HNP will comply with the requirements of the first sentence of the fifth paragraph. This clarification is needed since it is not always possible to promptly determine the cause of the malfunction. HNP will initiate proceedings to determine the cause, and will make such determination promptly where practical. Determination of the term "promptly" and the term "practical" will be the responsibility of plant management and shall be based on the effect of the condition on the immediate health and safety of the public.
6. Paragraph 5.2.8, Surveillance Testing and Inspection Schedule: In lieu of a "master surveillance schedule," the following requirement shall be complied with: "surveillance testing schedule(s) shall be established reflecting the status of all planned in-plant surveillance tests and inspections."
7. Paragraph 5.2.9, Plant Security and Visitor Control, requires certain procedures and controls. In order to ensure that a conflict between 10CFR 73 and Regulatory Guide 1.17 and ANSI N18.17 does not exist, HNP shall not follow paragraph 5.2.9. An NRC approved security plan shall be implemented prior to fuel loading.
8. Paragraph 5.2.11, Corrective Action, requires certain activities to be performed. In order to avoid conflict between requirements, HNP shall follow the requirements in Sections 17.3.1.6 and 17.3.2.13, in lieu of paragraph 5.2.11.
9. Paragraph 5.2.13.1, Procurement Document Control: When purchasing commercial-grade calibration services from certain accredited calibration laboratories, the procurement documents are not required to impose a quality assurance program consistent with ANSI N45.2-1971. Alternate requirements described in this table for Regulatory Guide 1.123 may be implemented in lieu of imposing a quality assurance program consistent with ANSI N45.2-1971.
10. Paragraph 5.2.15, Review, Approval and Control of Procedures: The third sentence in paragraph three is interpreted to mean: "Applicable procedures shall be reviewed following an accident, an unexpected transient or a significant operator error. Applicable procedures shall also be reviewed following an equipment malfunction which results in a reportable event."

Table B17-1. Conformance with QA Regulatory Guides and Industry Standards (Continued)

Regulatory Guide 1.33, Quality Assurance Program Requirements (Rev. 2) (Operation)
HNP complies with this guide, which endorses ANSI N18.7-1976, Administrative Controls and Quality Assurance for the Operational Phase of Nuclear Power Plants, with the following clarifications:

Paragraph 5.2.15 titled Review, Approval and Control of Procedures, states that, "Plant procedures shall be reviewed by an individual knowledgeable in the area affected by the procedure no less frequently than every two years to determine if changes are necessary. A revision to a procedure constitutes a procedure review." In lieu of this commitment, Duke Energy addresses programmatic controls in Section 17.3.2.14 to continually identify procedure revisions which may be needed to ensure that procedures are appropriate for the circumstance and are maintained current.

11. Paragraph 5.2.16, Measuring and Test Equipment - In order to properly address this paragraph, HNP submits the following discussion of M&TE:
    IEEE Standard 498-1975 defines measuring and test equipment (M&TE) as follows:
    Devices or systems used to calibrate, measure, gauge, test, inspect, or control in order to acquire research, development, test, or operational data to determine compliance with design, specifications, or other technical requirements. M&TE does not include permanently installed operating equipment or test equipment used for preliminary checks where accuracy is not required; for example, circuit checking multimeters.
    Note: M&TE does not include rules, tape measures, levels, and other devices if normal commercial practices provide adequate accuracy.
    There is a key distinction between installed process instruments and measuring and test equipment. A piece of measuring and test equipment may be used to calibrate a number of plant instruments. Thus, a calibration error could affect a wide variety of plant equipment. Process instruments, on the other hand, perform a single function and may be used to operate equipment, verify operability of equipment, or perform a single monitoring or trip function. In the case of measuring and test equipment, the key concern when a device is out of calibration is to identify other instruments to which this accuracy has been transferred and, secondly, to prevent recurrence. In the case of process instruments, the key emphasis is to prevent recurrence of the out-of-calibration condition.
    In ANSI N18.7-1976 (and other documents), the distinction between measuring and test equipment and process instruments is not well defined.
    The requirements in the second and third paragraphs in Section 5.2.16 will be applied to measuring and test equipment and those in the first and third paragraphs applied to process instruments with the exception that process instrumentation shall be "suitably marked or tracked to indicate calibration status" versus "suitably marked to indicate calibration status." in addition, a review of out-of-calibration process instruments will be made to determine if action is required to prevent recurrence. Such action may include modification, procedural revision, or corrective maintenance. Section 17.3.2.9 provides additional requirements for control of M&TE.
12. Paragraph 5.2.17, Inspections: As a general clarification, when inspections are not contained in a separate inspection report, inspection requirements will be integrated into appropriate procedures or other documents with the procedure or document serving as the record. Records of inspections will be identifiable and retrievable.
13. Paragraph 5.2.17, second to the last sentence in the last paragraph, "Deviations, their cause, and any . . .", to be consistent with paragraph 5.2.11, the cause of the condition will be determined for only significant conditions adverse to safety.
14. Paragraph 5.3.5(4), HNP interprets the review requirements for "supporting maintenance documents" which have not been incorporated in a procedure, be performed in an equivalent manner as described in approved procedures.